

Summary Information

Module Code	6571USST
Formal Module Title	Engineering Management
Owning School	Engineering
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 6
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Dante Matellini	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
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Partner Module Team

Contact Name	Applies to all offerings	Offerings
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Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
University of Shanghai For Science and Technology

Learning Methods

Learning Method Type	Hours
Online	11
Seminar	33

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-PAR	PAR	September	12 Weeks

Aims and Outcomes

Aims	This module is designed to develop the core management techniques required in modern industry.
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Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Apply decision making techniques to select a solution to a problem
MLO2	Apply a fundamental knowledge of intellectual property law to protect a solution
MLO3	Model product cost, sales and profit
MLO4	Explain fundamental marketing and sales strategies and contract law

Module Content

Outline Syllabus

Decision making tools. Selecting solutions from a range of options.

Defining and structuring a project. Developing a specification to meet a customer need. Organisational structures and functions. Product/process analysis visualisation tools (IDEF, Value Stream Mapping)

Project planning methods; introduction to current standards (reference to standards such as PRINCE2).

Fundamental principles of intellectual property law. Trade secrets, patents and publication.
Marketing and sales strategies and fundamentals of contract law.

Modelling product cost, sales, and profit. Economic modelling, sensitivities, forecasting cash flow (NPV) and investment appraisal.

Management of people and teams.

Module Overview

Additional Information

UNESCO Sustainable Development Goals

Quality Education
Industry, Innovation and Infrastructure
Partnerships for the Goals

UK SPEC AHEP 4

CEng.

M9 Use a risk management process to identify, evaluate and mitigate risks (the effects of uncertainty) associated with a particular project or activity.

M10 Adopt a holistic and proportionate approach to the mitigation of security risks.

M11 Adopt an inclusive approach to engineering practice and recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion.

M14 Discuss the role of quality management systems and continuous improvement in the context of complex problems.

M15 Apply knowledge of engineering management principles, commercial context, project and change management, and relevant legal matters including intellectual property rights.

M18 Plan and record self-learning and development as the foundation for lifelong learning/CPD.

IEng.

B9 Use a risk management process to identify, evaluate and mitigate risks (the effects of uncertainty) associated with a particular project or activity

B10 Adopt a holistic and proportionate approach to the mitigation of security risks

B11 Recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion.

B14 Recognise the need for quality management systems and continuous improvement in the context of broadly-defined problems.

B15 Apply knowledge of engineering management principles, commercial context, project management and relevant legal matters.

B18 Plan and record self-learning and development as the foundation for lifelong learning/CPD.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Report	100	0	MLO1, MLO2, MLO3, MLO4